

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,253		09/14/2000	Thomas P. Szumla	80708N-R	1048
1333	7590	08/04/2005		EXAMINER	
BETH R			NGUYEN, MADELEINE ANH VINH		
PATENT LEGAL STAFF EASTMAN KODAK COMPANY				ART UNIT	PAPER NUMBER
343 STATE STREET				2626	
ROCHESTER, NY 14650-2201			DATE MAILED: 08/04/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental	Application No.	Applicant(s)					
Office Action Summary	09/662,253	SZUMLA ET AL.					
omee notion cummary	Examiner AV/November	Art Unit					
The MAILING DATE of this communication app	Madeleine AV Nguyen	2626					
Period for Reply	ours on the seven shoot with the s	on coponacinos dadi cos					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on							
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
Claim(s) <u>1-7,12-17 and 22-26</u> is/are rejected.							
7) Claim(s) <u>8-11,18-21 and 27</u> is/are objected to.							
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine	ır.						
∑ The drawing(s) filed on <u>07 December 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct		• •					
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	e-(d) or (f).					
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents	• •						
3. Copies of the certified copies of the prior		ed in this National Stage					
application from the International Bureau * See the attached detailed Office action for a list	• • • • • • • • • • • • • • • • • • • •	ad.					
Occ the attached detailed Office action for a list	or the contined copies not receive	u.					
Attachment(s)	,, □						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)						
B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		atent Application (PTO-152)					
Paper No(s)/Mail Date	o) [_] Other:						

DETAILED ACTION

This communication is responsive to a telephone interview with Ms. Debbie Walczak on June 5, 2004.

Below is a supplemental action to clarify that claims 1-3, 13, 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuda (US Patent No. 6,081,347) instead of claims 1-3, 8-11, 13, 18-21 23-26 since claims 8-11 and 18-21 are objected.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, 13, 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuda (US Patent No. 6,081,347).

Concerning claim 1, Yasuda discloses an image processor (Fig.2) generating image output for a printer from image data received from an image source (the image is stored temporarily in 202) comprising a first processor system (201) having a first bus (bus connecting the first processor system 201 to 202) for communication with the image source 202, the first processor system further characterized by providing control of the image processing performed within the image processor; and a second processor system (205) in circuit communication with the first processor system 201 and having a second bus (bus connecting the second processor

Art Unit: 2626

system 205 to 202) for communication with the image source, the second processor system receiving image data from the image source via the second bus and perform the image processing in the image processor responsive to control by the first processor system.

Yasuda does not directly teach that the first processor system provides high-level control And the second processor system performs a majority of the image processing performed within the image processor. However, Yasuda teaches that the first processor system 201 (CPU) "perform the whole control" of the image processor (col. 4, lines 43-45) and the second processing system 205 "receives, via the high-speed CPU bus 204, an image formation command which is inputted from an external interface ..., and generates a bit-map image in accordance with contents of the command in order to output the image to a high-speed image bus. The RIP 205 can process page-description languages such as PS, PCL, PIPS, and Canon Printing System Language (CaPSL)." (col. 4, lines 57-64). It would have been obvious to one skilled in the art at the time the invention was made to consider the first processor system 201 provide high-level control of the image processor since it performs the whole control of the image processor and the second processor system 205 perform a majority of the image processor since, as claimed, the image processor is for generating image output for a printer from image data received from an image source while the second processor system 205 receives the image data from an image source and process the image based on the image formation commands received from the first processor system 201 in order to output the processed image for printing as taught in Yasuda.

Concerning claims 2-3, 13 the first processor system receives and transmits control data from the image source via the first bus; the printer is an ink jet and the second processor generates the image output in the form of the ink jet control signals.

Application/Control Number: 09/662,253

Art Unit: 2626

Claim 23 is method claim of apparatus claim 1. Claim 23 is rejected for the same rationales set forth for claim 1.

Concerning claim 24, Yasuda discloses an image processor as discussed in claim 1 above. Yasuda further teaches that the second processor system 205 is characterized by having an image data bus (bus connecting 205 to 202) providing a printer image data path separate from the printer control and status path (path between 205 and 201) for communication with the image source.

Concerning claim 25, Yasuda further teaches that the second processor 205 has a control/status bus connecting to the first processor 201 for providing a control/status data path (col. 4, lines 43-64).

Concerning claim 26, the control/status data path (path between 201 and 205) is separate from both the printer control and status path (path between 202 and 201) and the printer image data path (path between 205 and 202).

3. Claims 4-7, 12, 14-17, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuda as applied to claims 1-3 above, and further in view of Clark (US Patent No. 5,899,604).

Concerning claims 4-7, 12, 14-17, 22, Yasuda fails to teach that the raster image processor is in circuit communication with a plurality of color plane processors wherein each of the color plane processors corresponding to one of a plurality of color planes of the image data and the RIP processor performs separation of the image data into at least cyan plane data, yellow plane data, magenta plane data, black plane data, light cyan plane data, light magenta plane data, to generate image output for the printer. Clark discloses a computer with an eight-plane RIP

processor for forming black, yellow, magenta, cyan planes and light cyan, magenta, cyan planes and generating output image for printing (Figs. 2, 5; Abstract; col. 4, line 54 – col. 6, line 14). It would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Clark to the RIP processor in Yasuda since in Clark, it is a matter of well known in the prior art that a RIP processor performs separation of the image data into at least cyan, magenta, yellow, black plane data and light cyan, magenta, yellow plane data while the RIP processor in Yasuda and Clark can process color image data and generating an image output for printing.

Allowable Subject Matter

- 4. Claims 8-11, 18-21, 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 5. The following is an Examiner's Statement of Reasons for Allowance:
- a. Claims 8-11, 18-21 are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches an image processor as claimed in claims 1 and 24 wherein each of the plurality of color plane processors is further characterized by performing at least one of the following functions on its respective color plane data as part of generating image output for the printer: print masking, registration correction, failed nozzle correction.

Claim 27 is allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of

the said prior art which teaches an image processor as claimed in claim 24 wherein the image data bus provides a greater speed of transfer than the print control bus.

Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Menendez et al (US Patent No. 5,113,494) discloses a high-speed raster image processor capable of driving a printing engine at a high rate for use in an image management system.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 571 272-7466. The examiner can normally be reached on Monday, Tuesday, Thursday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on 571 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2626

July 22, 2005

Primary Examiner Art Unit 2626